IN THE SPECIFICATION:

Please amend paragraph [0002] of the publication as follows:

Welding wire feeder systems are commonly integrated with or used in conjunction with an arc welder to feed a wire electrode to a workpiece. The electrode may be a solid wire electrode, a coated electrode, or a cored electrode. Typically, the wire feeder is used in conjunction with a MIG or TIG arc welding process. Presently, there are just a few principal manufacturers of welding equipment. These manufacturers include The Lincoln Electric Company, Miller Electric, and ESAB. Each of these manufacturers construct welding accessories such as wire feeders, welding guns, etc. that are designed to be used with a specific brand of welding machine. With respect to wire feeders, it is ~~not uncommon~~ common for one manufacturer to design and build a wire feeder which operates on a different voltage than another manufacturer. As a result, welding accessories from various manufacturers are typically not intermixed with different brands of welders.

Please amend paragraph [0003] of the publication as follows:

Due to the incompatibility of a wire feeder for an arc welder from one manufacturer on an arc welder from another manufacturer, it becomes difficult or impossible for an operator to switch the wire feeder of one manufacturer to another arc welder by a different manufacturer when a particular arc welder malfunctions or requires service. It is ~~not uncommon~~ common at a particular welding site to have several different brands of arc welders. In a situation where one brand of arc welder is out of service, an operator typically cannot use another type of arc welder to continue the welding operation unless the arc welder is of the same brand as the one that was removed from service. As a result, costly downtime occurs when an arc welder is suddenly taken out of service during a welding operation. One way to address this problem is to have backup welders and wire feeders on

hand to minimize downtime. However, welding units and wire feeders are costly and a burden to store and transport. As a result, spare welding units and wire feeders are typically not taken to a welding site. Some users have, in the past, used a transformer to connect one brand of wire feeder to another brand of welder. The transformer is used to ramp up or ramp down the voltage and/or current from a particular brand of arc welder so that a different brand of wire feeder can be used with the arc welder. The transformer is typically connected to the power cable that connects the wire feeder to the arc welder. The transformer is commonly connected to the power cable by cutting the power cable and then electrically connecting the transformer in series with the power cable. The connecting of the transformer to the power cable has caused problems such as when the transformer is not properly connected to the power cable thereby causing damage to the wire feeder and/or arc welder, and/or an improper transformer is connected to the power cable thereby making the wire feeder inoperative and/or damaging the wire feeder and/or welder. Furthermore, the use of a particular transformer only enables a user to connect one brand of wire feeder to a specific brand of arc welder of another brand, thus still limiting the compatibility of the wire feeder to be used with a variety of different arc welders.

Please amend paragraph [0006] of the publication as follows:

In accordance with one aspect of the invention, there is provided a wire feeder that includes a welding wire motor used to feed a consumable welding electrode through a welding gun and to a workpiece at a desired speed. A wire reel may be connected to the wire feeder to constantly feed the welding wire to the wire feeder and through the welding gun. Alternatively, the welding wire may be continuously fed from a wire drum or container. The wire feeder may include a wire feed speed selector to adjust the speed of the welding electrode that is ~~fee~~ fed to the welding gun. The wire

feeder typically includes a welding gun connector to connect a welding gun cable to the wire feeder so that welding current is directed to the gun during a welding operation. The welding gun also typically includes an electrode cable which is connected to the wire feeder so that the welding electrode can be directed from the wire feeder through the cable and into the welding gun. The electrode cable and welding gun cable may be a single cable or multiple cables. The wire feeder can include one or more trays or compartments used to store various types of welding accessories. The wire feeder can also include one or more switches to activate or deactivate the wire feeder and/or one or more features of the wire feeder. The wire feeder may also include a shielding gas connector used to connect to a welding shielding gas source and a shielding gas line to direct the shield gas from the wire feeder to the welding gun. The shielding gas is directed through the wire feeder and into the welding gun to enable the shielding gas to be properly directed about a weld puddle during a welding process. The wire feeder can include a shielding gas regulator to control the flow of shielding gas through the wire feeder. In one embodiment of the invention, there is provided a wire feeder that includes a shielding gas inlet to enable shielding gas from a shielding gas source (~~e.g.~~ e.g., gas cylinder, etc.) to be fed through the wire feeder and into a shielding gas tube or a cable of a welding gun to provide shielding gas to a workpiece during a welding operation. In one aspect of this embodiment, the wire feeder includes a flow controller to control the flow rate of shielding gas through the wire feeder. The flow controller can be manually and/or automatically set. In another and/or alternative embodiment of the invention, the wire feeder includes a welding gun cable connector to connect the arc welding gun to the wire feeder which is used to direct a welding current from the wire feeder to the welding gun. A welding wire connector used to connect the welding gun cable or a wire cable so as to direct the welding wire from the wire feeder to the welding gun, a wire connector or wire opening used to receive a welding wire from a welding wire source (e.g., wire reel,

wire package, wire container, etc.) into the wire feeder, and a power cable connector which connects the wire feeder to a power cable which in turn is connected to an arc welder power source. In this particular embodiment, all the welding accessories and auxiliary components of a particular arc welding operation are connected to the wire feeder. Only the electrical power to run the components of the wire feeder and the arc welding current are generated by a power supply of a separate arc welder. In one aspect of this embodiment, the arc welder includes one or more selectors to control the wire feed speed, includes one or more selectors to select the type of electrode being used, includes one or more selectors to select the diameter of the electrode being used, includes one or more selectors to select the flow rate of shielding gas used, includes one or more selectors to select the type of shielding gas used, and combinations thereof. As can be appreciated, one or more of these selectors can be located on the wire feeder.

Please amend paragraph [0007] of the publication as follows:

In another aspect of the present invention, there is provided a wire feeder which includes a power conditioner designed to detect a current and/or voltage level flowing through the power cable from the power supply of the arc welder. A portion of the current generated by the power supply of the arc welder is typically used to power one or more components of the wire feeder (~~e.g.~~ e.g., wire feed motor, valves, sensors, internal electronics of the wire feeder, etc.). When a particular brand of wire feeder is used in conjunction with the same brand of arc welder, the current and voltage levels generated by the power supply of the arc welder are typically compatible with the electrical components of the wire feeder. However, when the wire feeder is connected to another brand of arc welder, the voltage and/or current levels generated by the power supply of the arc welder may be incompatible with one or more electrical components of the wire feeder. As a result,

the wire feeder cannot work, does not work properly, and/or one or more components of the wire feeder and/or arc welder are damaged. The power conditioner of the wire feeder is designed to detect the current level and/or voltage level from the power supply of the arc welder and determine whether the current level and/or voltage level is compatible or incompatible with electrical components of the one or more wire ~~feeder~~ feeders. In one embodiment of the invention, the power conditioner, upon determining or verifying that the current level and voltage level from a power source of a particular arc welder are compatible with the electrical components of the wire feeder, allows the current and voltage to pass unmodified to the electrical components in the wire feeder, and/or generates a control signal which is used by one or more controllers of the wire feeder to allow the voltage and current to pass into components of the wire feeder without modification. In another and/or alternative embodiment of the present invention, the power conditioner, upon determining that the voltage level and/or current level is incompatible with one or more electrical components of the wire feeder, modifies the current and/or voltage level so that the modified voltage and/or current level can be utilized by the components of the wire feeder, and/or generates a control signal which is used by one or more electrical components of the wire feeder to signal such electrical components to modify the current and/or voltage level so that the modified current and/or voltage level can be used by the electrical components of the wire feeder. In still another and/or alternative embodiment of the present invention, the power conditioner includes an AC voltage regulator, a DC voltage regulator, a current inhibitor, a phase regulator, and/or a frequency regulator used to adjust the voltage level, the current level, and/or the frequency of the current being received from the power supply of the arc welder when the voltage level, current level, and/or current frequency are incompatible with one or more components of the wire feeder. In yet another and/or alternative embodiment of the present invention, the power conditioner includes a microprocessor, a circuit

board, switches, etc. to facilitate in modifying the voltage level, current level, and/or current frequency from an incompatible power source. By incorporating the use of the power conditioner in the wire feeder, the wire feeder can be connected to different types and brands of power supplies of arc welders and enable the wire feeder to be used with such arc ~~welder~~ welders without having to modify any of the electrical components of the wire feeder. For example, the wire feeder can be designed to operate on a 24 volt power source. As such, when the wire feeder is connected to an arc welder having a power source that generates a 24 volt power source, the wire feeder is able to operate with the arc welder. In addition, the same wire feeder can also be connected to an arc welder that includes a power source that generates a 48 volt power source. When the wire feeder is connected to such an arc welder, the power conditioner in the wire feeder detects the higher voltage level and modifies or causes the received voltage to be modified by stepping down the voltage to 24 volts so that the electrical components of the wire feeder can operate off of the 48 volt power source. As a result, the versatility of the wire feeder is significantly increased since the wire feeder can be used with many different types and brands of arc welders without the concern of having to first modify one or more electrical components of the wire feeder to establish compatibility between the wire feeder and a different type or brand of arc welder.

Please amend paragraph [0022] of the publication as follows:

Referring now to the drawings wherein the showings are for the purpose of illustrating the preferred embodiment only, and not for the purpose of limiting the same, FIGURE 1 illustrates a basic arrangement of a Type A wire feeder 10 which is connected to a Type A power source 40. Likewise, FIGURE 1B illustrates a Type B wire feeder 10' which is connected to a Type B power supply 40'. FIGURES 1A and 1B illustrate a particular type of wire feeder being connected to a similar type of power source. For instance, the Type A wire feeder may be a Lincoln Electric type

wire feeder, which is connected to a Lincoln Electric arc welder. Likewise, the Type B wire feeder may be a Miller Electric wire feeder, which is connected to a power source of a Miller Electric arc welder. Both the Type A and Type B wire feeders are illustrated as having similar components. For instance, each of the wire feeders includes a wire feed motor 12, 12' which controls the speed of a wire electrode 30, 30' being fed from a wire reel 16, 16'. A circuit board or control board 14, 14' that is used to control the speed of the motor 12, 12' and to control the other components of the wire feeder. The wire feeders also include a cable connector designed to connect to a gun cable 22, 22' of a welding gun 20, 20'. The gun cable directs a welding current from the wire feeder to gun head 24, 24' of the welding gun. Wire electrode 30, 30' is also directed to the welding gun, as is a shielding gas, when used. During a welding operation, an arc is formed between the wire electrode and workpiece W which causes the wire electrode to melt and form a weld puddle on workpiece W. Wire feeders 10, 10' also include a power cable 18, 18' which connects the wire feeder to power supply 40, 40', respectively. Power supplies 40, 40' are typically housed in an arc welder. The arc welder typically includes one or more input selectors to generate a particular arc welding current and/or voltage for use in a particular welding operation. The power supply of the arc welder typically generates a current used for a particular type of arc welding procedure (~~e.g.~~ e.g., MIG, TIG, etc.). The power supply of the arc welder also supplies a particular current level and voltage to the wire feeder via the power cable so as to supply power to the electrical components of the wire feeder. As shown in FIGURES 1A and 1B, the same type of power supply is connected to the same type of wire feeder, thus the particular current level and voltage level being generated by a particular power supply is compatible with the electrical components of the particular wire feeder. For instance, the Type A power supply may generate a voltage level of 24 volts to a Type A wire feeder. Motor 12 and circuit board 14 of wire feeder 10 are designed to run off the current and voltage level generated by the Type A power source. The Type B power supply can be designed such that the voltage level

generated by the power supply is 48 volts. The motor and control board of the Type B wire feeder are designed to operate on such a voltage level. Because the motor 12' and control board 14' of the Type B wire feeder 10' are designed to operate off of a higher voltage level, the Type B wire feeder cannot be connected to the Type A power source since the Type A power source is a 24 volt power source, thus incompatible with the components of the Type B wire feeder.

Please amend paragraph [0024] of the publication as follows:

Referring now to FIGURE 3, there is provided a wire feeder 90 in accordance with the present invention. Wire feeder 90 is designated as ~~a~~ an U-Type wire feeder. This wire feeder is a universal type wire feeder which can be used with many different types of power supplies. As shown in FIGURE 3, wire feeder 90 can be connected to a Type A power supply 40, a Type B power supply 40', a type C power supply 40", etc. These power sources may be designed to generate a current and/or voltage level which is the same or different. For instance, the Type A power supply may be manufactured by The Lincoln Electric Company, the Type B power supply may be manufactured by Miller Electric Company, and the type C power supply may be manufactured by ESAB. As can be appreciated, the power supplies can be manufactured by other manufacturers. For purposes of describing this particular embodiment and not for purposes of limiting the same, the Type A power supply will be described as generating voltage and current to operate a wire feeder wherein the voltage level is 24 volts, the Type B power supply voltage level is 48 volts, and the type C power supply will be described as generating a voltage and current to operate a wire feeder wherein the voltage level is about 240 volts. Wire feeder 90 of the present invention is designed to be connected to all three of these different power supplies without having to modify the electrical circuitry of the wire feeder or power cable 100. As described above with respect to FIGURE 2, when the wire feeder is connected to a power supply generating a current and/or voltage that is

different from the current or voltage rated to operate the wire feeder, the power cable has to be modified to include a transformer 50 so that the power generated by a particular power source is compatible with the electrical components of the wire feeder. Wire feeder 90 of the present invention is designed to not require modification prior to the wire feeder being connected with a particular power source. As can be appreciated, power cable 100 may include a universal connector or an interchangeable connector to enable the power cable to be mechanically connected to a particular power source; however, the interchanging of a connector so as to allow a power cable to be mechanically connected to a particular power source does not constitute the altering of the electrical characteristics of the power cable or wire feeder 90 for purposes of the present invention.

Please delete paragraphs [0029] to [0031] of the publication.